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Profile of a Conservationist
Elizabeth Carter
Land Protection Director

Like most employees of The Nature Conservancy, Beth Carter is here for the mission. During her second year of undergraduate school at Muhlenberg College, Beth took a course in environmental ethics and things just clicked. The course opened Beth's eyes to the world of conservation, environmental justice and sustainability, and set her down a path to earn both a Juris Doctorate and Master of Environmental Law & Policy degree from Vermont Law School.

Equipped with a solid education and a passion to make the world a better place, Beth moved to Maryland and soon after was hired as the Land Protection Director for TNC's Maryland/DC chapter. One of the most critical projects that Beth inherited from her predecessor, Elizabeth Zucker, was to facilitate a final batch of land transfers to the Blackwater National Wildlife Refuge—an effort completed in January 2021 that was nearly four decades in the making.

Read the full story here —>

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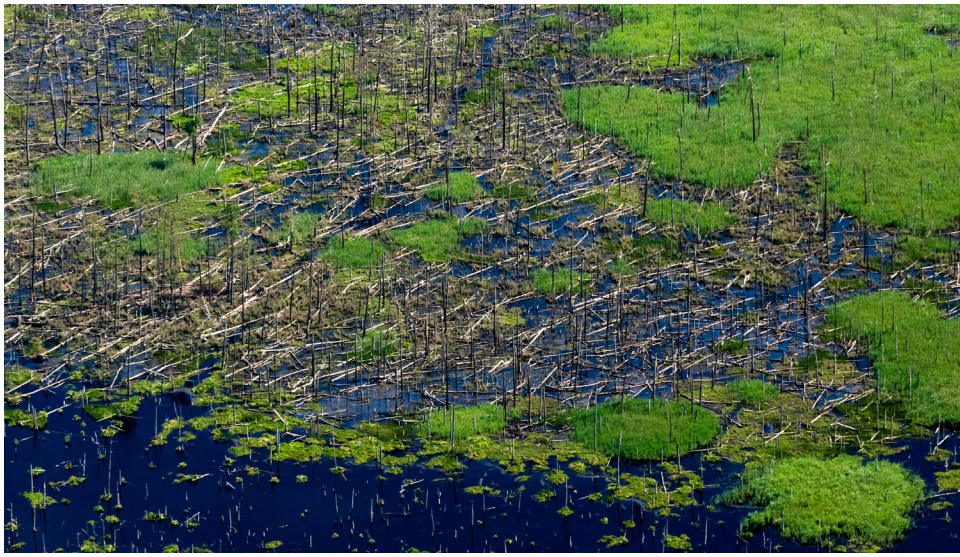

Loblolly pine ghost forest at Blackwater National Wildlife Refuge in Dorchester County, MD © Will Parson/Chesapeake Bay Program

A Refuge on the Front Lines of Climate Change

How TNC is supporting marsh migration at Blackwater

Badlands National Park, Great Sand Dunes National Park, Monongahela National Forest, Glacier National Park. These are just a few of America's National Treasures that The Nature Conservancy has helped conserve. Assisting federal, state and local government agencies expand public lands through assists and transfers is one of TNC's most productive strategies.

Here in Maryland, TNC has protected and transferred more than 5,000 acres of land to the U.S. Fish and Wildlife Service's Blackwater National Wildlife Refuge since the 1970s, with a focus on climate-resilient lands in recent years. The Blackwater Refuge is located in Dorchester County on the Lower Eastern Shore of Maryland, which is on the front lines for sea-level rise in the Chesapeake Bay region. Salt marshes, like those found at the Blackwater Refuge, have the ability to adapt to rising seas, but they need space and the right conditions to migrate inland and TNC is focused on helping facilitate that transition.

The Blackwater National Wildlife Refuge was established in 1933 as a waterfowl sanctuary for birds migrating along the Atlantic Flyway. However, Blackwater's roots extend much deeper into the soils of American history than 1933. On the same landscape, more than 100 years before the Refuge was established, Harriet Tubman was born into slavery and would later use the marshes and forests to help dozens of people escape from bondage through the "Underground Railroad." Going back even further in history, to the late 1700s, two Indigenous villages were forced south by colonists to the marshes of Blackwater from their rightful lands on the Nanticoke and Choptank Rivers. Today, approximately 300 descendants known as the Nause-Waiwash Band of Indians continues to preserve and promote their rich history in this region. TNC is proud of our conservation work at the Blackwater Refuge. Protecting this ecologically significant landscape also preserves the history of the communities that are connected to Blackwater's past, while ensuring the Refuge persists for nature and people to benefit from these public lands in the future.

A mature red oak towers over its younger neighbors in a stand of old-growth forest located in Maryland's Green Ridge State Forest. © Severn Smith/TNC

Managing for Old Growth

The Appalachian forest is more than 2,000 miles long, stretching from Alabama to Canada. This forest is ancient, connected and globally important. However, the vast majority of trees in the Appalachians were clear-cut around the turn of the 20th century, resulting in forests in which most of the trees are now the same age and lacking characteristics that most people have come to know as "old growth."

Western Maryland occupies only a small slice of the Appalachian forest corridor, but it is a critical slice. As the climate changes, plants and animals will need to shift their ranges north and upslope to find suitable habitat. Maintaining a healthy and connected Appalachian corridor creates that opportunity. It is crucial that we keep our Western Maryland forests a healthy and connected link in the chain.

A healthy Appalachian forest corridor must include a mosaic of forest types, carefully managed and preserved to meet the needs of both people and nature. To do this, we are utilizing science-based forest management practices like controlled burns, tree plantings and old-growth restoration. The Nature Conservancy's Maryland/DC chapter is currently leading a science-based initiative to accelerate old growth forest characteristics through a combination of specific management practices. By creating two demonstration projects in Western Maryland—one on TNC's Sideling Hill Creek Preserve and one in Savage River State Forest—our goal is to influence public and private forest landowners to adopt the best practices that will expand the amount of old growth forest across Appalachia.

To learn more about this project, visit **nature.org/mdforests**.

They're Baaaccckkk

Brood X Has Emerged

Periodical cicada © TNC

Anyone who lived in the Washington, D.C., region in 2004 might recall a few weeks in May when an ines-capable screeching sound could be heard from nearly every tree and local forest. They might have noticed large winged insects flying around haphazardly, or even had the pleasure of being unexpectedly smacked in the head by one of these big bugs. The sudden appearance of millions of screaming, red-eyed cicadas in your neighborhood is not something you easily forget.

The periodical cicada spends the vast majority of its life underground, but depending on the species, emerge after 13 or 17 years to transform, reproduce and ultimately die over the space of just a few days. These populations are called "broods," and one of the largest—Brood X—is active right now. Like so many other natural cycles, though, factors like ongoing human development and climate change could have a significant impact, so scientists are eager to see how many of the cicadas will make an appearance this year compared to previous generations.

We can all help contribute to the evolving body of cicada science. Using phone apps like Cicada Safari and iNaturalist, you can make digital ob-servations that use your phone's GPS to populate a map, helping to track and study Brood X's range during the 2021 emergence.

Learn more: nature.org/cicadas

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